

NAPCS Discussion Paper*

North American Product Classification System (NAPCS):

What's Been Done; What's Being Done; What's Next

by

Michael F. Mohr
U.S. Coordinator for NAPCS
Office of Associate Director for Economic Programs
Bureau of the Census

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Abstract: On February 2, 1999, Canada, Mexico, and the U.S. jointly launched a multi-phase initiative to develop a North American Product Classification System (NAPCS) to complement the North American Industry Classification System (NAICS). Reflecting its magnitude and complexity, present work plans for NAPCS anticipate that it will require at least four phases to implement, with completion targeted for mid-2007. At this time, Phase I is completed, Phase II is well in progress, and Phases III and IV are to come. As background for comparing and evaluating NAPCS, this paper begins with an overview of existing product classification systems. It then summarizes the history, objectives, and process of NAPCS; describes the work completed to date under Phase I; outlines the work being completed under Phase II; and suggests the work that will be completed under Phases III and IV. The paper concludes with issue questions for the AEA Advisory Committee. Comprehensive information about NAPCS and its progress to date— industries covered, product lists completed, contributing experts, and subcommittee membership— is found on the NAPCS Home Page at www.census.gov/napcs

* NAPCS Discussion Papers are provided to foster and facilitate professional exchange on matters related to the development and implementation of NAPCS.

I. Introduction to Existing Product Classification Systems

Product classification systems are traditionally used in a wide variety of applications including:¹

- ! identifying, defining, and classifying products produced at the industry, national, and international levels,
- ! coordinating the products identified in national accounts programs (including I-O, personal consumption, business expenditures, and productivity measurement) with those used in price measurement programs,
- ! monitoring the type and value of products exchanged in international trade,
- ! negotiating trade agreements, and
- ! facilitating research in the areas of market share, trends and shifts in consumer demand, strategic expansion, and structural change in the economy.

Existing national and international product classifications fall into two broad types. First are specific-use systems designed primarily for specialized applications, such as classifying imports and exports of goods or classifying expenditures by consumers or businesses, etc. Second are general-use systems that are designed to provide a common framework that can be employed for the range of applications noted above.

A. Harmonized System (HS)

The prototype of the first type of system is the Harmonized Commodity Description and Coding System (HS), which was developed by Customs Cooperation Council with input from the UN.² Adopted in 1983, the HS is designed primarily for use in classifying and collecting data on international transactions in transportable goods. Because it recognizes the requirements of legal administration by custom agencies, the organizational framework, legal texts and notes, and related elements are organized to facilitate legal interpretation. As such, the HS is the international standard for identifying and classifying traded goods.

The HS is an exhaustive nomenclature of internationally traded commodities (goods) classified according to several competing “intrinsic-nature-of-the-good” criteria: classification according to raw or basic material, classification according to the degree of processing, classification by use or function and classification according to economic activities. These principles were maintained in all subsequent revisions of the nomenclature. The Customs Cooperation Council, which changed its name to World Customs Organization (WCO) in 1994, also agreed, in principle, to introduce the industry-of-origin criterion in the construction of the HS.³ However, the principle that each subheading of the HS should contain only goods that are normally produced by a single industry, could not be strictly followed for various reasons.

B. Central Product Classification System (CPC)

A prototype of the second type of product classification system is the Central Product Classification (CPC) system of the UN. First issued in 1991 as the Provisional CPC, it was

¹For more on existing product classifications discussed here, see [1], [11], [12], and [13].

²Other examples of specialized classification systems include the following OECD-UN systems—Classification of Individual Consumption According to Purpose (COICOP), Classification of the Outlays of Producers According to Purpose (COPP), Classification of the Functions of Government (COFOG), and Classification of the Purposes of Nonprofit Institutions (COPNI)—and the UN Standard International Trade Classification; see [13].

³While not formally a product classification system, the Census Bureau’s Numerical List of Manufactured and Mineral Products is also an industry-of-origin classification.

revised, expanded, and reissued in 1998 as CPC Version 1.0.⁴ In contrast to the HS, the CPC (both versions) covers both goods and services products. The CPC includes categories for all products that can be the object of domestic or international transactions or that can be entered into stocks. It presents products that are an output of economic activity, including transportable goods, non-transportable goods and services. It also includes certain non-produced assets, such as land and legal instruments providing ownership over intangible assets, such as patents, licenses, trademarks and copyrights, although such non-produced assets are not regarded as products in the System of National Accounts (SNA).

Before the CPC was developed, no international classification system existed which encompassed both goods and services. As a result, many consider the CPC to be the most significant achievement of a two-decade UN led effort to develop an international set of integrated systems of economic activities (industries) and products. The CPC was created with the aim of providing a “root or central” framework for harmonizing many different kinds of national and international statistics concerning goods and services. Its purpose is therefore not to replace other product classification systems, but rather to enable the latter to be harmonized by transposing data from them into the relevant CPC categories. While the service portion of the CPC is unique, the HS is the root system for the goods portion of the CPC, which is an aggregate of HS detail. In addition to using HS titles and definitions for goods at the lowest levels, the CPC also shares industry-of-origin and intrinsic-nature classification criteria with the HS.

In sum, most major national and international product classification systems are based on either the HS or the CPC. Examples of the former include the European Community’s Prodcom (Community Production), Canada’s Standard Classification of Goods, the Canadian-U.S. Standard Classification of Transported Goods, and the United Nation’s Standard International Trade Classification (SITC). An important example of a CPC-based system is the CPA (Classification of Products by Activity) developed by Eurostat.

II. North American Product Classification System

Presently under development is a new general-use, international product classification system that, like the CPC, includes both goods and services but is not based on the CPC; this system is the North American Product Classification System or NAPCS.⁵ Begun in 1999, NAPCS is a joint effort by Canada, Mexico and the United States to develop an agreed-upon, integrated, and comprehensive list of products, product definitions, product codes, and a demand-side/market-oriented classification framework for both services and goods alike. It is intended that NAPCS will be used throughout the statistical community to coordinate the collection, tabulation, and analysis of data on the value of products produced by NAICS industries and on the prices charged for those products.⁶

NAPCS will address a significant deficiency of both the HS and CPC— the fact that the classification of

⁴ See [12] and [13].

⁵The present focus of NAPCS is on identifying and defining the products of NAICS service industries. As a result, it is not yet determined whether and how the NAPCS classification of goods will be related to the HS.

⁶NAPCS was spawned by the final three-country agreement for NAICS that was announced in the Federal Register Notice of April 9, 1997. There the three countries committed to a joint effort to develop improved classification systems for products in general and for service products in particular. Integral to the product classification accord was a common recognition by the statistical agencies of the three countries that, “market-oriented, or demand-based, groupings of economic data are required for many purposes, including studies of market share, demand for goods and services, import competition in domestic markets and similar studies.” See [4, p.38094].

products is not based on a single unifying theoretical principle for grouping and aggregating products. Rather both frameworks are based on several criteria including legal, intrinsic-nature-of-product, and industry-of-origin criteria. In contrast, NAPCS will be constructed on the demand-based aggregation principles that emphasize grouping products according to their principal use and, within that principal use, how they are used in relationship to each other.

Moreover, in the area of service products, it is widely agreed that the CPC lacks both sufficient product detail and definitional precision to be useful in General Agreement in Trade in Services (GATS) discussions, in large part because the process used to identify and define service products in the CPC was neither sufficiently detailed nor conducted with the active participation of industry experts.⁷ In contrast, the hallmark of the NAPCS process is that it is conducted with extensive input from and collaboration with industry experts. Internationally, NAPCS will provide the mechanism for ensuring consistency in the publication of product data across the three NAPCS countries. It is also expected to establish the international standard for identifying and defining service products in general-use classification systems and provide improved service product detail for international trade negotiations.

A. Phase I

In February 1999, the statistical agencies of Canada, Mexico, and the United States formally launched a multi-phase initiative to implement NAPCS, as a complement to the North American Industry Classification System (NAICS).⁸ The trilateral objectives for NAPCS are to develop a market-oriented, or demand-based, classification system for products that

- ! is not industry-of-origin based but can be linked to the NAICS industry structure,
- ! is consistent across the three NAICS countries, and
- ! promotes improvements in the identification and classification of service products across international classification systems, such as the Central Product Classification System of the United Nations.

Attachment 1 displays the 3-country Statement of Principles for NAPCS that was adopted in May 1999. In planning the NAPCS initiative, the three countries began with a consensus on the proposition that improved product data for service industries is critical to improving vital economic measures related to the measuring the growth of output, prices, productivity, and trade. In recognition of this fact, it was agreed that the early phases of NAPCS should be directed at identifying and defining the products produced by service industries. Accordingly, Phase I was initiated to explore the feasibility of identifying and defining products produced by reporting units classified to industries in four selected NAICS service sectors:

- ! Sector 51: Information
- ! Sector 52: Finance
- ! Sector 54: Professional, Scientific, and Technical Services, and
- ! Sector 56: Administrative and Support and Waste Management and Remediation Services.

Completed in early 2002, Phase I produced 36 well-defined provisional product lists (see Attachment 2) that cover the final products produced by reporting units classified in 111 U.S. NAICS service industries. In addition, approximately 1,700 trilateral products and 4,000 national products were identified and defined by this work.⁹ Attachment 3 displays page 1 of the product list developed for

⁷The use of the CPC in GATS has been discussed and promoted by Nijhowne and Usher in [10].

⁸See Federal Register Notice in [3].

⁹The NAPCS Home Page (www.census.gov/napcs) displays the 26 provisional product lists completed during 2001.

industries in NAICS Industry Group 5412– Accounting, Tax Preparation, Bookkeeping, and Payroll Services, and it illustrates the detail found in all the provisional product lists developed under NAPCS. With the completion of Phase I, the three countries are in unanimous agreement that this effort has been a major success, due in large part to the extensive participation of experts from industry.

B. Phase II

Phase II of NAPCS will focus on the following three goals:

- ! extending product development to additional NAICS service industries
- ! developing a prototype structure for NAPCS
- ! un-duplicating Phase I and II product lists.

B.1 Product Development

Launched in May, 2001 and scheduled for completion in mid-2003, Phase II extends product development to the products of reporting units classified to 97 additional U.S. industries in five additional NAICS service sectors:

- ! Sector 48-49: Transportation and Warehousing
- ! Sector 61: Educational Services
- ! Sector 62: Health Care and Social Assistance,
- ! Sector 71: Arts, Entertainment and Recreation, and
- ! Sector 72: Accommodation and Food Services.

B.2 Un-Duplication of Provisional Product Lists

Under NAPCS, all common products will have a common code, title, and definition wherever they are made. Thus, a second major goal of Phase II is to systematically review the products embodied in the individual product lists for duplicate products and adopt standardized titles and definitions for such products.

B.3 Developing a Prototype Classification Structure

As the final goal for Phase II, the three countries will investigate alternative prototype demand-side classification frameworks for NAPCS, based on the products compiled under Phase I, to illustrate the practical application of demand-side aggregation principles in organizing a diverse collection of products.¹⁰ The U.S. proposes that this exercise be carried out according to the ground rules, conceptual principles, and process outlined below.¹¹

1. **Scope of products included in NAPCS**– NAPCS is a system to identify, define, and classify the final products of producer reporting units. This will be accomplished first for the final products of three-country reporting units classified in NAICS industries. Subsequently, NAPCS will be expanded to include international products not covered by three-country NAICS reporting units; these will be incorporated where appropriate in the final NAPCS classification structure. Final products of reporting units are those created and transacted (sold

¹⁰As illustrated by Attachment 3, the products shown in each provisional product list are presented in the context of a provisional aggregation structure agreed to by the three countries. Although these structures contain logical groupings of products developed through extensive 3-country research, consultation with industry experts, and attention to common-sense demand-based aggregation principles, these structures bear no necessary relationship to the final NAPCS structure. Rather, their primary purpose is to facilitate refining product detail and obtaining agreement on the trilateral levels of product detail for each list, as provisional targets of comparability in the collection and publication of product data for the industries covered by the lists.

¹¹The three countries have basically agreed to points 2, 3 and 4 below but are still discussing point 1.

or transferred) by the reporting units to other reporting units, enterprises, institutions or persons; domestic or international. Transactions may be at market prices or on another basis to account for the outputs of governments and nonprofit organizations. The scope of NAPCS excludes production that is produced and consumed within the reporting unit, including intermediate production and the products of households that are produced and consumed within the households. In addition, while the services associated with the transfer of non-produced assets are included, the core classification itself is not intended to include non-produced assets.¹²

2. **The relationship between NAPCS and NAICS**– The classification principle and aggregation hierarchy used in NAICS (supply-oriented) and NAPCS (demand-oriented) will be independent. Conceptually, NAICS and NAPCS will have the same scope but will provide two different views of the same underlying data. NAICS presents output data based on the industry classification of reporting units that are providing the products. In contrast, NAPCS will present output data decomposed into products that are classified based on how the products are used, regardless of the industry classification of the business units that produce the product.

3. **Conceptual principles and criteria for NAPCS structure**

- ! should classify and group products in a “common-sense” manner that is broadly consistent with aggregation theory, according to how they are principally used and how they are used in relationship to each other;¹³
- ! should be hierarchical structure;
- ! should be both recognizable and useful to businesses;
- ! should not be exclusively based on class of customer or final/intermediate demand grouping categories but those grouping categories are acceptable when appropriate for any particular area.
- ! should recognize integrated nature of demand for products of original producers and services of resellers;
- ! should provide an integrated aggregation of goods and services based on how they are used in relationship to each other;
- ! should recognize multiple needs in statistical programs –e.g., needs of national accounts and price measurement programs:
 - (a) provide consistent classification of products under alternative nominal output measures– e.g., gross revenue or gross margin measures of output;
 - (b) provide clear boundaries between products of original producers and resellers– demand or use of things purchased for resale is different than demand or use of things for consumption or further processing
 - (c) provide product tabulations for both supply-side and demand-side price indexes and a Make Matrix link between products and industries that produce the products rather than an industry-of-origin type structure.

4. **Development Process for NAPCS**

Current trilateral efforts are focused on defining products produced in the U.S. services sectors. The focus on this area reflects the fact that well defined, detailed product lists for service industries is relatively nonexistent in product taxonomies anywhere, so the initial development of broad structure categories will focus on it. Until the full (goods and services) NAPCS product detail is known,

¹²The U.S. proposes that such assets could be included in satellite systems to the core NAPCS.

¹³On aggregation theory see [2] and [5]-[9].

however, any proposed structure must be provisional. Recognizing these limitations, the U.S. proposed the following process for developing the provisional structure for NAPCS:

- ! Define upper levels of NAPCS demand-based hierarchy as sufficient for the identification and placement of broad categories of goods and related services,
- ! Develop suggested titles and boundary definitions for the top-level aggregates and major service sub-aggregates included in the hierarchy,
- ! Develop detailed aggregation structure for service products underneath top-level NAPCS aggregates.¹⁴

III. Phase III

Expected to be launched in mid-2003 and completed in mid-2005, Phase III will seek to complete product development and classification for all NAICS private sector service industries. Specifically, the plan anticipates (1) extending product development to reporting units classified to:

- ! industries in the three NAICS service sectors not covered by Phases I and II– NAICS 53: Real Estate Rental and Leasing; NAICS 55: Management of Companies and Enterprises; and NAICS 81: Other Services (except Public Administration), and
- ! omitted industries classified to the nine NAICS sectors covered by Phase I and II.

During this time the three countries will also explore and develop the 3-country ground rules for extending NAPCS to both trade and goods-producing industries.

IV. Phase IV

Presently anticipated to begin and end between mid-2005 and mid-2007, Phase IV will seek to complete both extending NAPCS product coverage to goods and trade (reseller) industries and completing the details of the NAPCS product classification structure.

V. Field-Testing NAPCS

The Census Bureau plans to systematically field test the feasibility of collecting and publishing data for the provisional products developed under NAPCS, using the economic censuses and the services annual surveys. Products developed under Phase I.1 (completed in 2001) will be tested in the 2002 Economic Census, while the totality of products developed under Phase I, II, and III will be jointly tested in the 2007 Economic Census. In addition, products from all three phases will be incorporated incrementally into services annual surveys, beginning with the survey-year 2001.

VI. Issues for Advisory Committee Consideration

A. Independent versus Integrated Aggregation Structure

The U.S. Economic Classification Policy Committee (ECPC) has reached the conclusion that an integrated treatment of goods, services, and reselling products is consistent with the demand-based classification principle of NAPCS, while a separate treatment of goods, services, and reselling is not. In reaching its decision, the ECPC recognized that product detail for the manufacturing and trade sector products would not likely be completed in the foreseeable future (at least not by the 2007 Economic Census). With that in mind, the ECPC considered creating a separate aggregation structure for goods, services, and reselling products that could conceivably allow for comprehensive classification and data collection for service products by the end of Phase III. In short, while the ECPC considered the timing of the project, the uncertain schedule of work on trade and goods, and the usefulness of the system in the interim, the ECPC has adopted the more conceptually appropriate course of action that combines goods, services, and reselling products in an integrated framework.

¹⁴A realistic application of this process is illustrated by the example presented in attached Tables 1-3 below.

The two alternative aggregation structures considered by the ECPC, including three hypothetical divisions of products, are shown in scenarios A.1 and A.2 below. While both structures would cover the same scope of products, they would present the resulting data differently. The hypothetical products identified in the alternative aggregation structures can be grouped as food, clothing, and transportation.

A.1 Independent Aggregation Structures for Goods and Services

Total Output
 Goods
 Food
 Clothing
 Transportation equipment
 Services
 Food services
 Clothing services
 Transportation services
 Trade
 Trade of food and food services
 Trade of clothing and clothing services
 Trade of transportation goods and services

Benefit: allows for the development of a comprehensive structure for the presentation of data for service products free of considerations related to the unscheduled nature of manufacturing and trade industry products in the NAPCS process.

A.2 Integrated Aggregation Structure for Goods and Services

Total Output
 Food
 Food goods
 Food services
 Trade of food and food services
 Clothing
 Clothing goods
 Clothing services
 Trade of clothing and clothing services
 Transportation
 Transportation goods
 Transportation services
 Trade of transportation goods and services

Benefit: is more conceptually appropriate because it reflect the fact that goods and services are often used as close substitutes or complements to satisfy a common need.

Question 1: Does the Advisory Committee concur with the ECPC that an integrated aggregation structure is the appropriate demand-based framework for NAPCS?

Question 2: If the answer to question 1 is affirmative, does the advisory committee support the ground rules, conceptual principles, and process for developing the NAPCS structure outlined in section B.3 above?

Question 3: If a choice has to be made, does the Advisory Committee believe it is more important to expedite development of a complete but independent aggregation structure for presenting services product data than it is to develop a more conceptually appropriate demand-based aggregation system for NAPCS that may, for an interim, include only a partial or provisional architecture for presenting services data?

B. Scope of and Perspective for NAPCS

As indicated above, NAPCS is intended to be a general-use classification system. However, the U.S. maintains that the purpose for creating NAPCS was and should remain to provide a framework in which to classify the products of NAICS reporting units according to how those products are used (i.e. demand-based). As a corollary to its position, the U.S. also maintains that products should be primarily defined in NAPCS in a manner that is consistent with the understanding and record keeping of suppliers because they represent the dominant population of reporting units whose data NAPCS is primarily intended to classify. On this point, however, disagreement among the three countries has recently surfaced. Specifically, a counter proposal has been made to the effect that, since NAPCS is a demand-based system, products should be defined in NAPCS primarily from the perspective of expenditure surveys for households and businesses, etc. Under this argument, it has been proposed, for example, that the consumer would treat the following as the same product (delivered pizza): (1) a pizza bundled with delivered service by the pizza parlor and (2) a pizza purchased from a pizza parlor but delivered by the consumer's hire of a taxi to do so. The U.S. position is that, regardless of the perception that the consumer might have, the two products are not the same because in the second situation the consumer has purchased two separate products from two separate businesses.

Question 4: Does the advisory committee concur with the U.S. position on the scope and perspective for NAPCS?

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- [13] United Nations Statistical Division, Online Classifications Registry, <http://www.un.org/depts/unsd/class/class1.htm>).

Attachment 1

Three-Country Statement of Principles for the North American Product Classification System (NAPCS) (Adopted May 4, 1999)

Statistics Canada, Mexico's Instituto Nacional de Estadística, Geografía e Informática (INEGI), and the Economic Classification Policy Committee (ECPC) of the United States, acting on behalf of the Office of Management and Budget, have agreed that a common product classification system for the three North American countries is needed and should be put in place. They have further agreed that the new North American Product Classification System (NAPCS) should conform to the following principles:

1. The statistical agencies of the three countries acknowledge that market-oriented, or demand-based, economic data are required for many purposes, including studies of market shares and the demand for goods and services domestically consumed and internationally traded. Therefore, the three countries agree that the new North American Product Classification System should be based on a demand-based conceptual framework. A product classification system erected on a market-oriented or demand-based conceptual framework will assure maximum usefulness of product statistics for these and similar purposes.
2. The NAPCS will be a system for classifying all products produced by NAICS industries. However, the NAPCS structure will be independent of the NAICS structure since each of these classification systems provides different perspectives and jointly enhance the analytical potential of the resulting data.
3. The statistical agencies of the three countries agree to give special attention to identifying products and developing demand-based classifications that encompass: (a) service products in general; (b) new products; and (c) advanced technology products. For all products, statistical agencies will actively seek out industry expertise in all three countries, in order to generate the information required to identify products that can be defined, measured and for which prices can be established in accordance with the agreed upon demand-based economic concept.
4. In the interest of a wider range of international comparisons, the three countries agree to strive for compatibility between the detailed products of the North American Product Classification System and the most detailed level of the Central Product Classification (CPC), version 1.0, to the extent appropriate within a demand-based conceptual framework.
5. Phase I of the development initiative will result in a detailed list of products derived from four NAICS areas: Information (Sector 51); Finance (Subsectors 521, 522, 523, and 525); Professional, Scientific and Technical Services (Sector 54); and Administrative and Support and Waste Management and Remediation Services (Sector 56). The statistical agencies agree to complete Phase I during 2000. Subsequently, if Phase I is successful, it is expected that the three countries will commit to extending NAPCS to the full range of products classified within a demand-based framework by 2007.

Attachment 2

Provisional Product Lists Completed under Phase I of NAPCS

A. Products Lists for Sector 51 Industries

1. NAICS 511110: Newspaper Publishers
2. NAICS 511120: Periodical Publishers
3. NAICS 511130: Book Publishers
4. NAICS 511140: Database and Directory Publishers
5. NAICS 511210, 518111, 518112, 518210, and 54151:
Software Publishers, ISPs, Web Search Portals, Data Processing, Hosting, and Related Services, and Computer Design and Related Services
6. NAICS 512110 & 512120: Motion Picture and Video Production & Motion Picture and Video Distribution
7. NAICS 51213: Motion Picture and Video Exhibition
8. NAICS 51219: Postproduction Services and Other Motion Picture and Video Industries
9. NAICS 512210, 512220, and 512230: Record Production, Integrated Record Production/Distribution, and Music Publishers
10. NAICS 512240 & 512290: Sound Recording Studios & Other Sound Recording Industries
11. NAICS 515 & 5175: Broadcasting (ex. Internet) & Cable and Other Program Distribution
12. NAICS 516: Internet Publishing and Broadcasting
13. NAICS 517 ex. 5175: Telecommunications ex. Cable and Other Program Distribution

B. Product list for Sector 52 Industries

1. NAICS 52: Finance and Insurance

C. Product Lists for Sector 54 Industries

1. NAICS 5412: Accounting, Tax Preparation, Bookkeeping, and Payroll Services
2. NAICS 541310 & 541320: Architectural Services & Landscape Architectural Services
3. NAICS 541330: Engineering Services
4. NAICS 541340: Drafting Services
5. NAICS 541350: Building Inspection Services
6. NAICS 541360: Geophysical Surveying and Mapping Services
7. NAICS 541370: Surveying and Mapping (except Geophysical) Services
8. NAICS 541380: Testing Laboratories
9. NAICS 54161: Management Consulting Services
10. NAICS 541620: Environmental Consulting Services
11. NAICS 5417: Scientific Research and Development Services
12. NAICS 541810: Advertising Agencies
13. NAICS 541820 : Public Relations Agencies
14. NAICS 541830: Media Buying Agencies
15. NAICS 541840: Media Representatives
16. NAICS 541850: Display Advertising
17. NAICS 541860: Direct Mail Advertising
18. NAICS 541870: Advertising Material Distribution
19. NAICS 541890: Other Services Related to Advertising

D. Product Lists for Sector 56 Industries

1. NAICS 5613: Employment Services
2. NAICS 5615: Travel Arrangement and Reservation Services
3. NAICS 562: Waste Management and Remediation Services

Attachment 3

Provisional Product List for NAICS 5412: Accounting, Tax Preparation, Bookkeeping, and Payroll Services*

1 Industry Subject Area	2 Working Group Code	3 Tit- lateral Detail	4 English Title	5 English Definition	6 Product Exists In:			7 National Product Detail			8 NAICS Industries Producing the Product			15 CPC Code	
					C	M	U	C	M	U	Canada	Mexico	U.S.		
5412	1		Assurance, Bookkeeping, Compilation, Payroll, Taxation and Related Services												
5412	1.1		Assurance and Related Services	Financial auditing, tax auditing, review of financial statements with or without compilation; agreed-upon procedures for financial information, and other assurance and related services.	X	X	X				54-212 ?	541211			52211 52212 52213 52218 ?
5412	1.1.1		Financial Assurance and Related Services	Financial auditing, tax auditing, review of financial statements with or without compilation; agreed-upon procedures for financial information, and other financial assurance and related services.	X	X	X				54-212	541211			52211 52212 52213 52218 ?
5412	1.1.1.1		Financial Auditing Services	Auditing of financial statements or specific financial accounts.	X	X	X				54-212	541211			52211
5412	1.1.1.1.1	X	Financial Statement Auditing	An examination of accounting records and other supporting evidence for the purpose of expressing an opinion as to whether financial statements are presented fairly in conformance with an appropriate, disclosed basis of accounting.	X	X	X				54-212	541211			52211
5412	1.1.1.1.2	X	Specialized Financial Auditing	Auditing of specific financial accounts.	X	X	X				54-212	541211			52211
5412	1.1.1.1.3	X	Tax Auditing	An examination made by a public accountant empowered by the treasury authorities to file if a taxpayer with income above a given level has complied with the tax obligations that the law imposes.		X						541211			52211
5412	1.1.1.3		Financial Statement Review Engagements and Agreed Upon Procedures for Financial Information	Review engagements, with or without compilation services, to assess whether the financial statements being reported on are plausible within the framework of the appropriate criteria; agreed upon procedures engagements to provide reports on the results of applying client-specified procedures to financial information.	X		X				54-212				52212 52213 ?
5412	1.1.1.3.1	X	Financial Statement Review Engagements	A review consists primarily of inquiry, analytical procedures and discussion related to financial statements and financial information supplied to the accountant with the limited objective of assessing whether the information being reported on is plausible within the framework of the appropriate criteria. Review engagements are distinguishable from audits in that the scope of a review is less than that of an audit and therefore the level of assurance provided is lower. A review does not require the public accountant to seek supporting or independent evidence or to study and evaluate internal controls. Review services may be offered with or without compilation services.	X		X				54-212	541211			52212 52213

*? entries for NAICS codes in columns 13-14 and for CPC codes in column 15 indicate that the information is unknown or partially uncertain at this time.

Table 1

NAPCS High-Level Structure Illustration: Product Group, Sub-Groups and Boundary Definitions-- Food and Beverage Products for Persons

01 Food and Beverage Products for Persons

- 01.1 Processed and manufactured food and beverage products for persons, original producers
- 01.2 Processed and manufactured food and beverage products for persons, wholesaling
- 01.3 Processed and and manufactured food and beverage products for persons, retailing
- 01.4 Prepared food and beverage products for persons, for immediate consumption

Sample High-Level Boundary Definitions

The following sample definitions illustrate the boundary definitions for the high-level aggregations in NAPCS.

01 Food and Beverage Products for Persons

This product group includes food, beverage, and related service products that are used principally to accommodate the demand for food consumed by persons. Includes processed and manufactured foods and beverages products for persons; the services of resellers (wholesale and retail) used to acquire foods and beverages for persons; and food and beverage products provided by food and beverage service establishments. Excludes foods and food services intended principally for pets and other animals as well as original production and resale of raw and fresh food products used principally as intermediate inputs by food and beverage processors and manufacturers.

01.1 Processed and manufactured food and beverage products for persons, original producers

This product sub-group includes processed and manufactured foods and beverages products for persons by the original producers of those products. It excludes wholesaling and retailing.

01.2 Processed and manufactured food and beverage products for persons, wholesaling

This product sub-group includes the wholesaling of processed and manufactured foods and beverages products for persons.

01.3 Processed and manufactured food and beverage products for persons, retailing

This product sub-group includes the retailing of processed and manufactured foods and beverages products for persons.

01.4 Prepared food and beverage products for persons, for immediate consumption

This product sub-group includes the provision of food and beverage products for persons prepared for immediate consumption by food and beverage service establishments, including restaurants, cafeterias, bars, other eating and drinking places, caterers, food service contractors, and other food service providers.

Table 2

**NAPCS High-Level Structure Illustration: Product Group, Sub-Groups,
and Classes—Food and Beverage Products for Persons**

- 01 Food and Beverage Products for Persons
 - 01.1 Processed and manufactured food and beverage products for persons, original producers
 - 01.1.01 Bread
 - 01.1.02 Cereals
 - 01.1.03 Pies, pastries, and cakes
 - 01.1.04 Meat
 - 01.1.05 Fish and seafood products
 - 01.1.06 Milk, cheese, and egg products
 - 01.1.07 Oils and fats
 - 01.1.08 Fruit products
 - 01.1.09 Vegetable products
 - 01.1.10 Sweeteners, chocolate and confectionery
 - 01.1.11 Jams and jellies
 - 01.1.12 Other processed and manufactured food products
 - 01.1.13 Non-alcoholic beverages, except milk
 - 01.1.14 Alcoholic beverages
 - 01.2 Processed and manufactured food and beverage products for persons, wholesaling
 - 01.2.01 Bread
 - 01.2.02 Cereals
 - 01.2.03 Pies, pastries, and cakes
 - 01.2.04 Meat
 - 01.2.05 Fish and seafood products
 - 01.2.06 Milk, cheese and egg products
 - 01.2.07 Oils and fats
 - 01.2.08 Fruit products
 - 01.2.09 Vegetable products
 - 01.2.10 Sweeteners, chocolate and confectionery
 - 01.2.11 Jams and jellies
 - 01.2.12 Other processed food products
 - 01.2.13 Non-alcoholic beverages, except milk
 - 01.2.14 Alcoholic beverages
 - 01.3 Processed and manufactured food and beverage products for persons, retailing
 - 01.3.01 Bread
 - 01.3.02 Cereals
 - 01.3.03 Pies, pastries, and cakes
 - 01.3.04 Meat
 - 01.3.05 Fish and seafood products
 - 01.3.06 Milk, cheese and egg products
 - 01.3.07 Oils and fats
 - 01.3.08 Fruit products
 - 01.3.09 Vegetable products
 - 01.3.10 Sweeteners, chocolate and confectionery
 - 01.3.11 Jams and jellies
 - 01.3.12 Other processed food products, n.e.c.
 - 01.3.13 Non-alcoholic beverages, except milk
 - 01.3.14 Alcoholic beverages
 - 01.4 Prepared food and beverage products for persons, for immediate consumption
 - 01.4.01 Prepared food and beverage products for persons, for immediate consumption, eating and drinking places
 - 01.4.02 Prepared Food and beverage products for persons, except eating and drinking places

Table 3

NAPCS Structure Illustration: Complete Hierarchy for Product Class– Prepared Food and Beverage Products for Persons, eating and drinking places

- 01.4.01 Food and beverage products for persons, eating and drinking places
 - 01.4.01.01 A La Carte meals, on premises with table service
 - 01.4.01.01.1 Breakfast items
 - 01.4.01.01.2 Appetizers
 - 01.4.01.01.3 Soups
 - 01.4.01.01.4 Salads
 - 01.4.01.01.4 Entrees
 - 01.4.01.01.6 Side dishes
 - 01.4.01.01.7 Desserts
 - 01.4.01.02 Buffet meals, on premises with table service
 - 01.4.01.02.1 Breakfast items
 - 01.4.01.02.2 Lunch/dinner
 - 01.4.01.03 Complete meals, on-premises with table service
 - 01.4.01.03.1 Breakfast items
 - 01.4.01.03.2 Lunch/dinner
 - 01.4.01.04 A La Carte meals, on-premises without table service
 - 01.4.01.04.1 Breakfast items
 - 01.4.01.04.2 Appetizers
 - 01.4.01.04.3 Soups
 - 01.4.01.04.4 Salads
 - 01.4.01.04.5 Entrees
 - 01.4.01.04.6 Side dishes
 - 01.4.01.04.7 Desserts
 - 01.4.01.05 Complete Meals, on-premises without table service
 - 01.4.01.05.1 Breakfast items
 - 01.4.01.05.2 Lunch/dinner
 - 01.4.01.06 A La Carte meals, off-premises
 - 01.4.01.06.1 Breakfast items
 - 01.4.01.06.2 Appetizers
 - 01.4.01.06.3 Soups
 - 01.4.01.06.4 Salads
 - 01.4.01.06.5 Entrees
 - 01.4.01.06.6 Side dishes
 - 01.4.01.06.7 Desserts
 - 01.4.01.07 Complete Meals, off-premises
 - 01.4.01.07.1 Breakfast items
 - 01.4.01.07.2 Lunch/dinner
 - 01.4.01.08 Non-alcoholic beverages, on-premises with table service
 - 01.4.01.09 Non-alcoholic beverages, on-premises without table service
 - 01.4.01.10 Non-alcoholic beverages, off-premises
 - 01.4.01.11 Alcoholic beverages, on-premises with table service
 - 01.4.01.11.1 Wine
 - 01.4.01.11.2 Beer
 - 01.4.01.11.3 Liquor
 - 01.4.01.12 Alcoholic beverages, on-premises without table service
 - 01.4.01.12.1 Wine
 - 01.4.01.12.2 Beer
 - 01.4.01.12.3 Liquor
 - 01.4.01.13 Alcoholic beverages, off premises
 - 01.4.01.13.1 Wine
 - 01.4.01.13.2 Beer
 - 01.4.01.13.3 Liquor